

PISTON RING WITH PROJECTION

Abstract

A piston ring is positioned in a groove of a piston and has an outer peripheral face. The outer peripheral face is generally tapered to an edge and includes a projection. The projection extends radially outwardly from the outer peripheral face along an upper surface of the piston ring. The projection reduces the gap between the outer peripheral face and a wall of the surrounding cylinder. The gap is typically exposed to combustion gases and the projection reduces the exposed area. Ring collapse is the separation of the outer peripheral face from the wall of the cylinder because of downward pressure forces of the combustion gases. Accordingly, the projection reduces the occurrence of ring collapse.